

Abstract of the Disclosure

Provided is a method of depositing an ALD thin film. The method includes (S1) loading a wafer on a wafer block; (S2) depositing the ALD thin film on the wafer; (S3) unloading the wafer, on which the ALD thin film is deposited, from the wafer
5 block; (S4-1) loading a dummy wafer on the wafer block; (S4-2) stabilizing the flow rates and the pressures of gases in the reactor by spraying only an inert gas or a mixture of the inert gas and a cleaning gas in the reactor; (S4-3) supplying RF power to the showerhead so as to activate the cleaning gas and mostly removing a thin film deposited on a surface of the showerhead by using the activated cleaning gas;
10 (S4-4) unloading the dummy wafer from the wafer block; (S4-5) repeating steps 4-1 through 4-4 at least once using new dummy wafers; and (S5) purging the inside of the reactor.